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Cornell Countryman

April, 1958

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U. S. DEPARTMENT OF AGRICULTURE



NEW JOHN DEERE EQUIPMENT

Brings Chemistry to the Cornfield

GREAT strides for increasing corn yields have been taken by chemists in the past few years. They have given corn growers the chemicals to increase yields with high-analysis fertilizer and reduce losses through positive control of weeds and insects that rob growers of millions of dollars each year.

New Planter, New Attachments

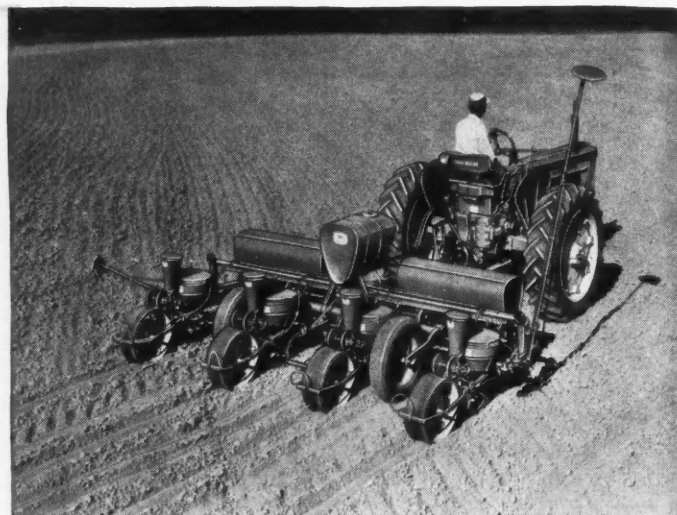
And John Deere is 'way out ahead with equipment that provides a practical means of taking full advantage of these profit-boosting chemicals. The new 4-in-1 494 Planter sets the stage for higher yields by planting with top speed and accuracy. The fertilizer attachment deep-places today's high-analysis fertilizer . . . places the plant food in a band to *one side* and *below* the seed, right where most authorities agree it should be placed.

What's more, the new 494 Planter has a pre-emergence weed sprayer that applies weed-killing chemicals on top of the soil over the planted rows. Weeds are killed before they emerge. The corn is undamaged.

Equipped with its matching insecticide attachment, the 494 deposits granular insecticides in the soil. Damage and losses from wireworms, cutworms, grubs, army worms, and other profit-thieves are a thing of the past.

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The new John Deere DDT Applicator provides fast, efficient, and positive control of corn borers. The applicator deposits granular DDT in the whorls of the corn—right where the worm-like larvae live and do their damage. In heavily infested areas, the John Deere DDT Applicator can increase yields up to 25 per cent.



Plant the corn accurately . . . "feed" it properly . . . and wage chemical warfare against weeds and insects ALL in one time- and money-saving operation. That's just what owners of the new 494 Four-Row Planter can do. For 6-row planting, there is the new John Deere 694 that offers the same features.



John Deere DDT Applicators are available in 4- and 6-row sizes. As the illustration shows, the John Deere Applicator is front-mounted to give the operator a good view of his work.



JOHN DEERE
MOLINE, ILLINOIS

"WHEREVER CROPS GROW, THERE'S A GROWING DEMAND FOR JOHN DEERE FARM EQUIPMENT"

Cornell Countryman

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APRIL, 1958



It's

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Welcome Sweet Spring!

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* * * * *

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* * * * *

Jackets too, in new hues and styles.

This is just a hint—come in and see how spring has sprung in our Men's and Coed Shops!

Cornell Campus Store

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Is Ag-Domecon Council Dying a Slow Death?

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Can you answer these questions?

1. Have you ever heard of Ag-Dom?
2. Who is the president of Ag-Dom?
3. What schools are represented in Ag-Dom?
4. How many representatives are there in all?
5. Name a major event sponsored by Ag-Dom?
6. Do you think the following purposes have been filled by Ag-Dom in the past?
 - 1) Liaison between the students and faculty to promote better relations.
 - 2) Interest students in activities and co-ordinate the activities of the clubs.
 - 3) Serve the interest of the students.

In a recent poll of a 100 student cross-section taken in a Rural Education lecture, 91% had heard of Ag-Dom; 74% knew what schools were represented; 44% named one event that Ag-Dom sponsors. Only 8% knew that Don Taylor was this year's president; and 4% had a fair idea of how many representatives are on the council.

Of the students polled, approximately 30% felt that Ag-Dom had filled the three purposes; 14% said absolutely no; the rest just didn't know.

That the Ag-Domecon Council is necessary and should be a vital part of the upper campus is obvious. However, the poll above shows that is far from vital in the minds of the students.

The same old excuse is used for this poor recognition—student apathy. Yet, the organization just sits idly back and complains about low attendance at events and lagging finances.

The only way Ag-Dom can put itself back in a position of importance is through: 1) finding out what is of vital interest to students, 2) planning the year's events around this, and 3) top-notch publicity.

First and foremost, Ag-Dom must go out and find what makes the students tick. And, the only way to do this is to ask them and listen to them—keeping alert to the issues of importance on the upper campus.

With these ideas in mind, Ag-Dom could plan its yearly program around a wider area than it has in the past—lectures, student forums, student faculty discussions, and social events.

For the past few years Ag-Dom has been sponsoring the same events—now is the time for new ideas that are of interest to the students.

Then, Ag-Dom has got to go to the students with publicity that sells its events to each and every student. Open meetings publicized in the *SUN* or the *Countryman* beforehand are a good start. Whatever the means, it can not sit idly around and wait for the newspaper, the magazines, or the students to come to them.

The freshman orientation classes offer a potential area of publicity if used more fully than at present. An Ag-Dom representative could go personally to these classes and sell the organization to the new frosh.

Ag-Dom could build up what might be termed a "faculty reserve"—members of the faculty who realize the importance of the council and would do some person to person publicity in addition to giving the organization some form of outside authority.

The upper campus clubs are the smallest select units which any organization can reach on the upper campus. Ag-Dom might profit by a campaign to impress on the clubs the benefits they would get from active participation and a vote on the council.

Whatever they do and however they do it, Ag-Dom can not afford to sit back and wait. It must combine selling ideas with top-notch publicity to bring itself back into a vital position on the upper campus. B.L.D.

Letters to the Editor

A Word from one of the "217 Strangers"

Dear Editor:

THANK you for your timely editorial "217 Strangers—Must They Remain So?" It is really a pity that Americans miss this chance to learn of the customs, ideas, and philosophies of these "foreign students at Cornell." These 217 students from 30 nations offer a wealth of information for young Americans—some of which may be useful in their future vocations—some of which may be treated as just another item added to their long list of easily accessible facts—all gathered without going through books and articles.

Some of the best friends I have are foreigners like myself. There is my Hungarian freedom fighter friend, a Japanese business major, a Nigerian, an Indian, a Syrian—people whom I could not have met elsewhere and, from them, I gathered knowledge which I could not have found anywhere else.

WHEN we came over here, we were told by both American and Philippine officials that we are here not only to pursue graduate work but also to learn about the American way of life. We were to keep both ears and eyes open; we were to mingle with the "average" American student and, if possible, to infuse some of our own ideas, philosophies, and opinions about their system or way of life. I have been faithful only to the first, since I have not had the chance to try the second and third. It is a lot more difficult than I thought.

I do have a number of good American friends but I can count them all on my fingers. Most of them are either students of sociology, foreign affairs, or my engineering classmates. I do not know whether the American students are really aloof or just taking things for granted. When they do strike up a conversation with me, there are a lot of things they are surprised at: for instance that the Philippines is not a part of either the West Indies or of the Hawaiian Islands.

When I tell them that I am on a ICA-Philippine Government grant, I find that ICA, the International Cooperation Administration, which administers the billions of dollars of American Economic Aid, means nothing to them. And then, there was a fellow who had had a look at an old book where the Philippines' aborigines were shown at the Saint Louis Exposition, and he thought that the Filipinos are still in the hunting and fishing stage.

HOWEVER, let me mention the wonderful job that Mr. Dave Williams, foreign student counselor, is doing, and also, the International Organization at Cornell University and the One World Club. But again only a few come in contact with us. At one gathering, I had a chance to talk with one of the officers of Interoc and I asked him why at one international gathering like that one, there were very few Americans (in fact all of them were officers of Interoc or of Willard Straight Hall Campus Relations Committee.) He just shrugged it off and told me, "That is the way it is here at Cornell." I gave him some information about our International Organization at the University of the Philippines, College of Agriculture. He was really surprised to know that the Filipinos compose 50% of the total membership, that some of these are taking foreign students to their homes during vacations and that some of them have become very good friends of these students and that at least a few are intending to visit other countries as soon as they are through with college. These same students will go back someday, perhaps to become leaders in their own countries and I am sure they will go home with a feeling that they have been to our country—that what they saw had no artificiality, no bias, and that what they learned was worth while.

—Juan B. Uy, Grad

The



Story:

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Remember, Empire pays its full share of taxes, including federal income taxes.

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West Winfield



Secretary of Agriculture Ezra Taft Benson

Research at Land Grant Colleges

Benson reviews function
of research in modern
agriculture.

By EZRA T. BENSON

LAND grant universities like Cornell play a vital role in agriculture. Through research, extension work, and education they have helped bring about the amazing agricultural efficiency enabling today's farm worker to produce in one hour what it took two hours to produce in 1940 and three hours in 1910.

Because of this technological revolution, the 20 million U.S. farm people, less than one percent of the world's population, produce between two-fifths and one-half of the world's output of eggs, meat, and milk.

Today's U.S. farm worker produces enough to fill the food needs of 21 persons. In 1940 his production was enough to fill the needs of five.

Output per farm has risen 77 percent since 1940—partly due to larger but fewer farms.

Acreage of crop land used in 1957 was slightly less than in 1940 but higher yields raised total crop production 24 percent.

In the last few years, the number of milk cows has been the lowest on record and the number of laying chickens has been far below the level of the 1940's. But production has been at or near record levels.

Total livestock production this year is expected to be 40 percent above 1940, with most of the gain due to increased output per breeding unit. The number of breeding units is up only eight percent.

Agricultural efficiency has provided the American consumer with the best diet in the world, and it is a basic reason for our having the world's highest standard of living.

Yet there are weak spots in U.S. agricultural research and development. Our surpluses point them up.

IT isn't enough for research—whether by the Federal Government, land-grant colleges or private organizations—to give farmers means of efficient production. There must be other research that anticipates change in farming growing out of these production improvements, and that helps farmers adjust to them.

Our Nation's agriculture has a vital stake in this other research—utilization and marketing research.

Our marketing research aims at holding down marketing costs and expanding markets for farm products through improved efficiency in every

step from farm to consumer. More than 500 marketing research projects are under way.

In utilization research, USDA scientists have discovered a method of preserving dairy cream with added sugar. This sugar-preserved cream, with 40 percent butterfat, keeps well without refrigeration. Our scientists also have developed a method of retaining the natural flavor in processed fruits, like jams, jellies, and juices. Flavor formerly lost in processing now can be recovered and returned to the product. Of special interest to consumers, a wash-and-wear finish is being perfected for cotton fabric and clothing. This new treatment, designed for application by regular dry cleaning establishments, helps cotton garments to resist wrinkling as well as to retain creases set in the fabric. These are just three of our many utilization research projects.

MUCH more utilization and marketing research is necessary, however.

Agriculture poses unending challenges, in other fields as well as research. Continued leadership by the land-grant universities is essential if these challenges are to be met.

CORNELL COUNTRYMAN

Sportsmen's Cost of Living

Money paid for licenses
is money well-spent.

By JACK E. HOPE '61

AS tales of the battle for outer space occupy leading positions in today's newspapers, "trivial matters" such as recreation for the future become forgotten. But as these issues of "lesser importance" are pushed aside, the chances of providing outdoor facilities and additional recreational lands for future enjoyment are rapidly vanishing.

Recent issues of the New York State *Conservationist* have very energetically advocated the need for an increase in the price of this state's fish and game licenses. The doctrine has been supported by facts and figures indicating the need for additional funds in order to improve upon, or perhaps even maintain, the present fish and wildlife programs.

The necessity for an expanded program of acquisition, management, and utilization in order to keep pace with a rapidly expanding population should be apparent. With an ever increasing number of people turning to fishing and hunting as a means of enjoyment, the available space for each sportsman is decreasing at an alarming rate. In the early history of this country, when lands and wildlife were abundant and populations were low, careful management, requiring specially trained men, was not nearly so essential as it is today. However, as civilization has expanded, wildlife areas have decreased proportionately, making it necessary to utilize all available resources to near maximum by careful regulation of game herds, employment of reforestation projects, and similar practices. This, then would be the function of increased revenues, land acquisition and improvement, hiring of highly trained

personnel, and a general modernizing of conservation practices.

AMERICANS who take part in hunting or fishing seldom realize their extreme good fortune in being able to enjoy the right to hunt and fish for

A few more years and he'll make happy hunting.



the small sum of money required of an individual for the sustenance of these sports. A European sportsman justifiably looks upon his American counterpart with envy, since European sport is not undertaken without great expense, a result of shrunk game areas and dense population. On that continent, an individual hunter must, for example, accept the responsibility of paying for damage done to crops by tame animals and of hiring skilled game managers to regulate herds. As a result, most wild flesh is sold to restaurants in order to obtain funds for financing expenses.

The annual increase in fees suggested by the conservation department is not unreasonable, amounting to an increase of only two or three dollars for the average sportsman. As compared to the nation, New York's present fees rank considerably lower than those charged by most of the other states. It is a privilege to be able to aid the advancement of these cherished sports; and logically, those who enjoy the benefits of fishing and hunting should be the ones who serve as the contributors to the program.

THE sportsmen's fish and game dollars are well spent. The miles of sparkling trout streams, the unexploited, "undeveloped," but unequalled beauty of our forests, the abundance of wildlife all spell happiness to any nature lover. Whether your particular share in today's outdoor heritage takes the form of an occasional outing to a favorite trout stream, or whether it appears as a platter full of venison steaks, the contributions made today will guarantee the same share tomorrow.

F.A.S. and Farm Prosperity

American farms and industry depends upon foreign markets.

By GERALD P. HIRSCH '59

MAINTENANCE of a high level of United States agricultural exports is essential to the continued prosperity of American farming, an industry which depends upon foreign markets for its very existence.

Sixty million of the 326 million acres of United States cropland planted in the year ending June, 1957, were used to produce goods for overseas consumption. This is the equivalent of one out of every five acres harvested.

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Credit for the supersalesmanship responsible for this volume should go to the Foreign Agricultural Service which works with U. S. trade and agricultural groups on market development projects ranging from market surveys and analyses to cooperative programs utilizing foreign currencies.

Commodities dependent upon foreign outlets vary greatly:

Crop	Amt. Exported (1956-57)
Rice	85%
Cotton	57
Wheat and wheat flour	55
Non-fat dry milk solids	48
Dry whole milk	38
Tobacco	30

Ten nations purchase 78% of the produce this country exports:

Country	Purchases (in millions)
West Germany	\$175
India	165
Italy	120
United Kingdom	100
Canada	90
Japan	80
Korea	75
France	60
Pakistan	40
Belgium	30

Market development activities are numerous but there are six of major importance and interest:

1. Market Surveys and Analyses:

These studies serve as a guide to United States exporters. Information on foreign markets is constantly obtained and analyzed and then furnished to the trade and others interested. The primary sources of such information are the reports of attachés of the United States Foreign Agricultural Service.

2. Market Information and Service:

One way in which foreign market information helps to build export markets is by bringing foreign buyers and United States exporters together. Weekly USDA publications keep exporters, producers, and handlers up to date on the market situation.

3. Reducing Foreign Trade Barriers:

The underlying objective in the development of markets is to secure the reduction or removal of trade barriers, including exchange controls and other government regulations which serve to limit export markets for United States products.

4. Export Programs:

For the past four years, U.S. traders have been assisted in the exportation of farm commodities through competitive pricing and special government export programs.

5. Use of Foreign Currency:

This program is designed to assist trade and agricultural groups in developing export markets through the use of part of the foreign currencies accruing from sales.

6. International Trade Fairs:

FAS organizes and manages exhibits, provides space, furnishes supplies and equipment, and pays travel and administration costs. Through trade fairs, FAS and participating U.S. groups have made direct promotional contacts with some 10 million traders and consumers abroad.

These are just a few of the activities FAS carries on in order to increase the volume of United States agricultural products sold overseas and they are always on the lookout for ideas for developing new markets.

May 6: Aggie Meets Artsie

This in the Straight lobby?

By BRENDA L. DERVIN '60

AS the first twenty spectators amble through the "Straight to the Country" exhibition this coming May 6 viewing the orchid display and laughing at the hatching chicks, the members of the Willard Straight Campus Relations Committee will breathe a sigh of relief. And rightly so, for this committee will have just climaxed many long hours of work preparing for this event.

"Straight to the Country" was born eight years ago in the meetings of what was then the Willard Straight Host-Hostess Committee. Set up as a

one-day effort to improve upper-lower campus relations, "Straight to the Country" has grown into a three-day exhibition and a highlight of the annual Willard Straight events.

Today, the program has expanded to a three-day affair arranged by the Campus Relations Committee in cooperation with Ag Dom Council, the upper campus clubs, and the various school departments.

SINCE 1949, certain displays have become "trademarks" of "Straight to the Country." Ag Engineering's duty-



worn tractor, the hatching chicks from Poultry Club, and "Eggbert," the talking chicken (recently replaced as an attention-getter by Floriculture's orchid display) have all become favorites. Recent additions—Plant Pathology's micro-slides, the Veterinarian table, and Conservation's stuffed animals—have been well-received by visitors.

"Straight to the Country" will be featured in Willard Straight this year from May 6-9.



"Buying real estate is a lot like getting married."

BUYING real estate is a lot like getting married. If your judgment is good and if you're lucky, it'll bring you happiness and security.

There are those who never seem to find the right girl. These are the bachelors and the renters. Either they can't find a girl (or a house) to meet their standards or, if they do, they lack the nerve to take the final steps.

There is also the third class who get a new bride every year or two. These are the gamblers. They're always hoping that the next fling will be the lucky one. While the most experi-

enced, these are the least stable; their roots never take hold.

THE traditional seller, perhaps inadvertently, accentuates the positive and minimizes the negative. While in the past, the purchaser bought at a great risk, he now has the law on his side, thus minimizing dishonest dealings. The prospective buyer can also buy a property can always have his property appraised.

This appraisal of real estate is the equivalent of a courtship or engagement before marriage. Only at this point can you hire a professional to

Bachelors and Brokers

By HENRY STACHNEIWICZ, Grad.

appraise your prospective property and don't have to fend for yourself.

Inadequate or improper financing is a common mistake made by purchasers of farms and businesses. It is not the size of the debt that matters; it is the ability with which it can be paid. An adequate market survey often alleviates problems of lack of cash to pay debts.

TAKING these factors into account, the purchaser can strike a very shrewd bargain and come out with a sound business investment.

SINCE the beginning of mankind, the tearful whimpering of a fevered child has created sore spots in parents' hearts. The arrival of the medical man with his supply of herb medicines and herb potions was greeted with signs of joy and hopefulness. His skill was superior, but his tools inferior. It was only through the efficiency of the doctors' abilities that the great scourges of mankind have been prevented from running wild, for they did not have the vast store of tested and effective medicines that we have today. We no longer hear of young children dying from diphtheria. Disfigurement from smallpox and the shocking effects of tetanus have been brought to a minimum. We are presently approaching the season when polio strikes, but even this is being wiped out. All this thanks to the new science of immunology.

Every substance gaining entrance to the bloodstream of a human is easily spread by the blood over the entire body. Bacteria and the poisons which they produce are also distributed throughout the system. It is therefore important that the body should possess active defense mechanisms to combat these infective pathogens.

The level of susceptibility is to a considerable extent connected with the properties of the individual's blood. As we know not all people are susceptible to different infectious diseases. Some remain well even if they are in contact with sick people. Such resistance to infectious diseases is called "immunity."

SOMETIMES a person possesses an inherited immunity towards a certain disease, such as smallpox. However, more often such resistance develops after the person has had the disease. If a person has had smallpox, he usually does not contract it a second time. He has acquired immunity against it.

Scientists have long held that "there is no immunity like convalescent immunity," meaning that immunity which is acquired after infection. Poliomyelitis is another good example of this principle. Those who recover from the effects of this virus infection appear to have life-long immunity. In this actively acquired type of immunity body cells are stimulated and "trained" to build a permanent and active defense against the attacking forces of an invading organism. Both the inherited and actively acquired immunities are called "natural immunities." However there are certain infectious diseases from which one can suffer without ever attaining immunity, the common cold is one.

Vaccinations are helping to wipe out the world's most dreaded diseases.

Immunity against certain infectious diseases can be developed by injecting biological preparations into the bloodstream. The result is termed "artificially acquired immunity," and may be subdivided into two types: active and passive.

ACTIVE artificial immunity to smallpox, for example, is induced by the use of a protective or prophylactic vaccination. To obtain the vaccine, a calf is first infected with smallpox, called "cowpox" when in the cow's system. Then the fluid from the little bladders appearing on the cow's body is collected and transferred to a cut on the skin of the person to be vaccinated. The calf tolerates the smallpox easily, weakening the bacteria. These weakened bacteria may cause a small swelling in the vaccinated area or slight fever, but these effects quickly subside. As a result the person acquires the ability to fight smallpox bacteria. Consequently they cease to be dangerous to him.

The term "vaccine" was first used by the scientists to describe the weakened smallpox virus taken from the calves and used for protective inoculation in the human body. It was also used by Pasteur, and is still in use today to describe any suspension of dead or attenuated bacteria used for immunological purposes.

How can we explain the effects of the vaccine, and its relation to the acquired immunity of the vaccinated person? First the vaccine produces the same immediate effects of the body as the actual acquisition of the

An Injecti



Another

disease. However, the uncomfortable effects of infection are bypassed. (A slight amount of inconvenience may still be encountered as, for example, we saw in the case of smallpox).

After acquiring the disease in a natural manner, or after being vaccinated with the disease producing organisms, weakened or inactivated so that they cannot multiply, the body forms substances in the blood called "antibodies," which stand ready to fight any new members of that same type of pathogen if they enter.

ect of Health

By ARTHUR M. SMITH '59

It is well known that bacteria of diphtheria mostly settle on the tonsils of the throat. However, while in the throat, they produce a virulent poison. Using a dense filter, it is possible to separate the bacteria from the fluid in which they develop. This filtered liquid, perfectly free from bacteria is just as poisonous as the bacteria themselves. If injected into the body, it causes the same dangerous symptoms of the disease as do the bacteria. This proves that the diphtheria bacteria produce a special poison or toxin which causes the severe symptoms of the disease. As soon as the poison enters the body, special substances begin to be produced in the blood which make the diphtheria toxin harmless to the organism. These substances represent a class of special antibodies called "antitoxins."

If the body can produce antitoxins rapidly and energetically enough, it can weaken and even entirely counteract the harmful effect of the diphtheria toxin. If a person has been vaccinated for diphtheria some time before the antibodies or antitoxins will indeed be present in quantity. However, a person who has not been vaccinated may contract diphtheria and find himself in need of an immediate supply of antitoxins. Serum containing such ready antitoxins can be introduced under the skin of the person. This is the basis of the passive immunization method. The serum is spread by the lymph and blood of the person throughout the body and immediately goes into action to counteract the invading foreign substances.

SERA are being introduced at the present, not only against diphtheria, but against many other diseases such as measles and tetanus. In order to obtain ready antitoxins and antibodies, an animal, usually a horse or rabbit is immunized. That is to say, an artificial immunity is produced, either by injecting the animal with weakened or killed bacteria or by introducing the toxins produced by bacteria. The animal body responds by producing an antitoxin. The blood serum obtained from such an animal, if introduced into the body of the patient, will supply the latter with ready antitoxins. Unfortunately the human body destroys these foreign substances within eight to ten days, frequently with side effects such as hives and serum sickness. Subsequent injections of the serum may lead to severe reactions. Therefore serum from animals is used only in emergency situations, and repeated only under special circumstances. It must of course be obvious that the human organism does not participate in this process of immunization. It obtains prefabricated antitoxins produced in the body of an animal.

SUCH a passive immunity produced without the participation of the body itself is, as we have noted, short lived. But, nevertheless, it acts immediately on introduction into the body. The active artificial immunity, on the other hand, is produced with the active participation of the body itself.

Active immunity enables the body to produce antitoxins. Active immunity lasts much longer than passive, on the average of a year or two, and in the case of certain vaccines such as smallpox, several years. But, the body begins to produce antibodies only gradually after the vaccination. Immunity is acquired one, two, or even three weeks after inoculation.

The susceptibility of a person towards diseases, even though he may be inoculated is changeable. It may decrease or increase in accordance with the general condition of the body. So, for instance, overwork or exposure to cold lowers resistance against infectious diseases by lowering the vitality and strength of the body. This is the reason one contracts grippe, pneumonia, or any other infectious disease when he is exhausted. Despite all medical science can do to prevent disease, the prime requisite for good health is a strong body and a clear healthy mind.

Fellas - - Give a Buffet



All set for spring entertaining.

WHILE Spring is making a valiant effort to come to Ithaca, many of the campus groups are anticipating the dinner parties that often follow the March winds and April rains. Perhaps, some are also dreading the trials and tribulations that come with giving such a party.

Giving a dinner party in the grand old college manner and still letting the hosts enjoy themselves is no easy matter. However, the answer to this problem is easy—buffet!

EMPHASIS in buffet is placed on the speed of service. However, as any Cornellian knows, lack of planning will make the best methods result in chaos and confusion. So, the first thing the party-giver does is plan the eating arrangement—as this in turn determines the kind of food to be served. The party-planner can turn to three different buffet methods—the big decision depends upon the occasion, the number of guests, and the space available.

Floors, as a student's first love and general center for every known activity from studying to sleeping, are the perfect setting for the most informal of the buffet methods. Provided the guests enjoy sitting pow-wow style, you can arrange for them to serve themselves at the main table and then squat down in their allotted areas. The "up and up" host can provide little trays for his guests, and at the same time, save the sanity of all present and prevent any impromptu juggling routines.

Of course, table space can be provided for the party with more guests or in cramped quarters. This arrangement lends to a more formal party for the spring season.

THE host could give the same little trays, used back in the floor party, to the guests and provide seating space. Here again impromptu juggling performances can result as the guests can not possibly handle more than the tray and a few implements. Remember this when you're planning a buffet—unless you have a space at a table for every guest, they will have difficulty handling many dishes.

When you have chosen your eating arrangement, the really important job (at least to your guests) comes your way—what to eat! In more culinary terms, you must plan the menu. A buffet menu must actually look nice in final 3-D form and must also be kept hot easily.

Buffets are the answer for spring party season.

By NORINNE COLE '58

In eating, informality generally means hearty eating; and hearty eating generally means a hot main dish, salad, relishes, buttered breads, a simple dessert, and a beverage.

CASSEROLES are often used as the main dish, but there is no reason why a substitute couldn't be made—cold meat slices and potato salad, fried chicken and cole slaw, or the popular pizza: all excellent choices.

The salad not only complements your main dish, but also helps fill up those hungry guests. Pickles and relishes aren't necessary but usually add to the conversation and the taste of the meal. In breads you have a choice of rolls, biscuits, muffins, sliced French bread, or fruit and nut breads.

The dessert mustn't be forgotten. Usually pies, cakes, or cookies (something not too fancy, but good) are the easiest to serve and the best received. Also, these don't require any last minute preparation. This is important for, by this time, the host is dragging himself around.

Now that most of the work is done, all you have to finish is an attractive arrangement of the food on a main serving table. It is best to set up the goods in the order they will be eaten with enough plates, napkins, and silver close at hand.

A well-planned buffet is the kind of dinner party that even the guys can give and give well. The effort is minimum and the results maximum.

CORNELL COUNTRYMAN

Germ warfare and insect irradiation save American farmers billions annually.

By NANCY LINK '60



A battle in the war against disease.

INSECTS and disease cost us \$9 billion a year. Research against the diseases and pests that cost the American economy about 9 billion a year is a sound investment, whatever the cost!

GERM warfare is one of the interesting research projects being carried on in the U.S. The object of this is to spread a virus disease of insects of which at least five are known, on a field to infect insects and cause their death. At the Geneva Experiment station, progress in the control of the cabbage looper, a major pest of that crop and important to New York State farmers, has been demonstrated. This destructive cabbage worm is the only cold crop insect for which suitable chemical control is not available. Experiments have shown that the virus contained in one diseased worm is sufficient to infect more than one billion healthy worms, and that the same amount is enough to treat one acre of cabbage.

MITES, those tiny, spider-like creatures that may reduce apple yields by as much as 500 bushels to the acre over a two-year period, are being experimented with at the Geneva Station. Although these little mites, the European mite and the tow-spotted spidermite being most important in New York orchards, are small, they multiply rapidly and are present in large numbers. At peak activity it is not unusual to find 500 eggs and hatched mites on a single leaf. These tiny mites present problems to the experimenter in maintaining cultures and in determining the

number on trees. Geneva entomologists are using a machine for brushing mites off.

A practical eradication campaign is a lot cheaper than living with a pest year after year, says Dr. Clarkson of the U.S. Department of Agriculture. Among the diseases that have practically been eradicated are cattle tick fever, cattle scabies, fowl plague, the Asiatic form of Newcastle disease of poultry, as well as hoof and mouth disease in North America. Plant pests such as Mediterranean fruit fly, citrus blackfly, and citrus canker have been successfully eradicated. Chemical fumigants are important weapons

against the gypsy moth of New York and New England, and in other parts of the country to eradicate the fire ant, medfly, and Hall scale. An interesting example of techniques that make use of biological methods is the use of irradiated flies to eradicate the screw-worm. Male flies are made sexually sterile by radiation and then released. Because female screw-worm flies mate only once, the repeated release of sterile males increases the chances of their mating with the sterile males. As the natural population drops and the release of sterile male flies is held steady, the odds keep increasing that females will mate only with sterile males and eradication of the insect will result.

Unexpected Guests?

Eat out at the new

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A Monument to Friendship

HISTORIC Mount Olympus looks down on a fertile plain in northern Greece — on a building which would not be there without the help of the Cornell United Religious Work and a group of thirty-three American and fifteen Middle Eastern students.

This building—the Cornell Center—is at the American Farm School near Thessalonika. To this school on the coast of the Aegean Sea come boys to learn to increase the productivity of their farm land and to be rural leaders.

Established in 1904, the farm school has grown from a plot of several barren acres to an expansive 350 acres of green fields. Its staff has increased from three to twenty-seven professors and student body from 10 to 180.

WHEN Bruce Lansdale, a former Cornellian, became president of the expanding Farm School in 1955, he saw a need for a new building to provide conference rooms and to house single faculty members. He asked CURW to help raise money for the building, and to send a work crew of students to help build it.

Cornell accepted the challenge. Widespread publicity got interested friends and alumni to contribute \$3,000 initiating the "Project to Greece."

On June 17, 1956, the thirty-three American students and their leader, the Rev. Alfred Lee Klaer, flew to Amsterdam, where they boarded trucks and traveled through Europe to Greece. The students started work on the Cornell Center at once. They began making cinder blocks and cementing them to form the basement and walls of the building. When the students left after four weeks, the center with its walls half up looked like a historic Greek ruin.

THROUGHOUT the winter, faculty and students of the school worked on the structure. When the second group of 19 American students arrived in the summer of 1957, the building was nearly completed.

Lenore McGee, a senior and one of the fifteen Cornellians who went last summer described her experience:

"When our group arrived at the Farm School, we were warmly greeted in English by the twelve Greek students we were to work with. The Greek students spoke English so well that we picked up a little Greek during our four week stay. The one word we did use frequently was *ouk*, or no. This was to keep waiters from pouring their favorite olive oil all over an appetizing plate of food."

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..... Cornell Center

By GAIL GUTEKUNST

The student workers were divided into three groups. One group put a floor in the Center. Lenore's group made small cinder blocks and began a tool shed, while the third group made an extra supply of large cinder blocks.

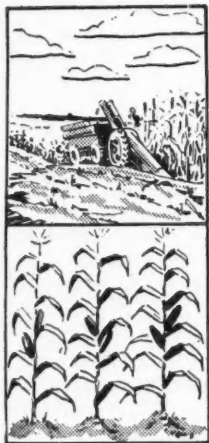
Work began at 7:30 with the girls working side by side with the boys. Lenore says, "At 10:30 we took a lemonade break, and at 1:30 we put down our shovels, showered, and then ate. The remainder of the day was playtime. We'll never forget swimming in the sparkling Aegean. Often the boys would spend an afternoon scaling nearby Mount Olympus. Evening was a good time to talk, and we exchanged many ideas with our new friends."

In this manner the "Project to Greece"—the Cornell Center—was completed. It now forms a structure three stories high—a tribute to the patriotic Greek people, especially to the students who can remember seeing Communists burn their homes and carry off their families, but whose courage always shows itself.

Lenore explains, "I feel a geographic identification with the people I met and knew in Greece. From working with these patriotic people, I have a different perspective on what is actually meaningful. Now I am more aware of so many different things, like government, art, and music. And I appreciate the Greek people more than ever."



Students working on the Cornell Center.



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Eastman Stage (Front row, left to right): Jonas Weil '58, Abigail Stimson '60, Herbert Stoevener '58. (Back row, left to right): John Porter '58, James Doyle '58—first place winner, Don Taylor '59.



Rice Debate Stage (Left to right): Lawrence Dries '59, Douglas Innes '59—second place winner, Sieglinde Dieken '58—first place winner, Gerald P. Hirsch '59, James Doyle '58, Robert Hunter '58.

Photographing Amebae

By JILL H. BECKOFF '61

"SMILE pretty for the camera," may sound like a queer way to address an ameba, but it's a stock expression in the photographer's trade and there is no reason to drop it just because the subject happens to be microscopic in size.

Not every picture, however, is so carefully posed; there are times when a candid shot is more appropriate. At such moments the photographer must use the utmost care and caution in order to escape notice. And, again, the photomicrographer — the man who snaps pictures through a microscope — is no exception.

He will set his slide in place; focus scope and camera; check light, distance, shutter speed; and warily click the shutter. A skilled photomicrographer can get his subjects in their most vital poses: the all-important metaphase, the crucial last moments

of telophase, the early warning signs of prophase—all are captured and preserved for posterity.

SUBJECTS are carefully chosen for beauty, interest, and educational value before even being given a chance at a screen test. Every subject must be carefully placed in just the right position. It must be dressed and groomed appropriately and placed in the most favorable possible light before the shutter is opened.

At their best, the results are distinctly delineated studies of suspended action; a bad photomicrograph may have delicately blending colors, merging and flowing in a pleasing expressionistic design.

Filters, fancy lenses, light meters, and all the other paraphernalia of the photographer are utilized in portraying the lilliputian life beneath the photomicrographer's lenses.

Different microscopy methods are

also used. Many a preliminary hour may be spent in choosing the combination of lenses to give the best magnification. The advisability of oil emersion may be another problem heavy on the photomicrographer's mind. Stains and dyes must also be considered as must be the permanence of the microscope slides.

WHERE does all this get him? Good results, like those of any photographer, are very gratifying and these have the added advantage of being extremely useful to the biology teacher, who can flash them off and on at will, exposing them to the views of more people over a longer period of time than any ordinary microscope slide. So, next time you see a slide projected on the wall of one of your lecture rooms, think of the artist who posed for it and the cells who worked many long hours under hot lights, and smile back.

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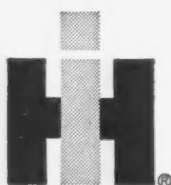
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